Iron-Catalyzed Asymmetric Transfer Hydrogenation of Ketimines

**Significance:** The authors report an iron-catalyzed asymmetric transfer hydrogenation under mild conditions that gives chiral amines with high enantioselectivity (94–99% ee). The system provides a solution to the challenging C=N bond reduction and proceeds with 2-propanol as the reducing agent.

**Comment:** Iron(II)-PNNP complexes that catalyze the asymmetric reduction of N-(diphenylphosphinoyl)- and N-(4-tolylsulfonyl)ketimines were developed. The (R,R)-diamine catalyst produces the (S)-amine. (S,S)-3 are found to be the most active and stereoselective catalyst. The reaction outcome is influenced mainly by the steric around the imine carbon but is insensitive to its electronic character.